

# Appendix D: Special-Status Species Evaluation

## Purpose of this Appendix

A total of 55 special-status wildlife species and 28 special-status plant species were considered in the evaluation of the Cascades Diversion Dam Removal Project (see Table D-1). These special-species include those listed under the federal Endangered Species Act of 1973, as amended (USFWS 2002), species listed under the California Endangered Species Act or accorded “special status” (i.e., considered rare or sensitive by the California Department of Fish and Game), and park rare plants. The purpose of this document appendix is to:

- Evaluate the effects of the proposed action on special-status species or their critical habitat that are known to be or could be present within the project area
- Determine the need for consultation and conference with the U.S. Fish and Wildlife Service
- Conform to requirements of the Endangered Species Act (19 United States Code [USC] 1536 [c], 50 Code of Federal Regulations [CFR] 402) and the National Environmental Policy Act, 42 USC 4321 et seq., implemented at 40 CFR Parts 1500-1508)

Each species in Table D-1 was evaluated to determine (1) the known or likely occurrence of a species or its preferred habitat in the vicinity of the project area and the possibility of a species or its preferred habitat types occurring in areas expected to be affected; (2) the direct physical loss of habitat; (3) the loss of habitat from its modification; and (4) the effective loss of habitat due to construction activity or noise. Habitat fragmentation was also considered. The special-status species are considered further in this environmental assessment (in Chapter III, Affected Environment, Chapter IV, Environmental Consequences, and Appendix E, Special-Status Species) if actions proposed in the alternatives could have direct, indirect, or cumulative impacts on the species.

The National Park Service has determined that several of the 83 special-status species listed in Table D-1 warrant further consideration in the body of this environmental assessment, the Wawona riffle beetle, a number of special-status bat species, harlequin duck, and California spotted owl. The remaining 71 special-status species do not occur in the project area and there would be no direct, indirect, or cumulative effect on these species from actions proposed in the alternatives. These species are not evaluated further in this environmental assessment.

## Special-Status Species Categories

The federal, state, and National Park Service special-status species listed in Table D-1 are categorized as:

- Federal endangered: Any species that is in danger of extinction throughout all or a significant portion of its national range.
- Federal threatened: Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its national range.

- **Federal species of concern:** Any species that may become vulnerable to extinction on a national level from declining population trends, limited range, and/or continuing threats (note that this is no longer an official U.S. Fish and Wildlife Service category, but is still considered in this document because it contains many species that could become threatened or endangered).
- **Federal species of local concern:** Species of local or regional concern or conservation significance.
- **Federally proposed:** Species officially proposed (in the Federal Register) for listing as endangered or threatened.
- **Federally delisted:** Delisted species, species to be monitored for five years.
- **State of California endangered:** Any species that is in danger of extinction throughout all or a significant portion of its range in the state.
- **State of California threatened:** Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its state range.
- **State of California species of special concern:** Any species that may become vulnerable to extinction on a state level from declining population trends, limited range, and/or continuing threats; could become threatened or endangered.
- **State of California rare (plants only):** A native plant that, although not currently threatened with extinction, is present in small numbers throughout its range, such that it may become endangered if its present environment worsens.
- **Yosemite National Park rare (plants only):** Identified by the National Park Service as rare.<sup>1</sup>

## Critical Habitat

Critical habitat has not been designated for any federally listed species that is known or has potential to occur within the project area. However, critical habitat for the California red-legged frog has been designated by the United States Fish and Wildlife Service northwest of the project area within Yosemite National Park (final rule dated March 13, 2001, Federal Register 66:14625-14674).

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<sup>1</sup> Park rare plants include those that are locally rare natives, listed by the California Native Plant Society, endemic to the park or its local vicinity, at the furthest extent of their range, of special importance to the park (identified in legislation or park management objectives), the subject of political concern or unusual public interest, vulnerable to local population declines, or subject to human disturbance during critical portions of their life cycle.

**Table D-1**  
**Special-Status Species Considered in this Analysis**

	Status <sup>a</sup>				
Species	USFWS	State	Park	Habitat Type/Occurrence	Determination
FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES					
INVERTEBRATES					
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT			Found in deciduous riparian habitat with elderberry species ( <i>Sambucus spp.</i> ) below 3,000 feet. Suitable habitat for this species occurs in lower reaches of the gorge and El Portal. Cascades Diversion Dam is above the range of this species.	<b>Removed from Further Analysis.</b> Cascades Diversion Dam is above the range of this species. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
FISH					
Delta smelt <i>Hypomesus transpacificus</i>	FT	CT		This species occurs only in Suisun Bay and the Sacramento-San Joaquin estuary ("Delta") near San Francisco Bay in California. Though the species does not occur in Yosemite National Park, the park contains the headwaters of tributaries that feed into downstream habitat for the species.	<b>Removed from Further Analysis.</b> This species does not occur within Yosemite National Park. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	FT	CSC		Habitat for this species includes tidal fresh and brackish waters of the Sacramento-San Joaquin Delta, Suisun Bay, Tidal marshes in Suisun, Napa, and Petaluma, and the main stem of the Sacramento River. Though the species does not occur in Yosemite National Park, the park contains the headwaters of tributaries that feed into downstream habitat for the species.	<b>Removed from Further Analysis.</b> This species does not occur within Yosemite National Park. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Central Valley steelhead <i>Oncorhynchus mykiss</i>	FT			This species occurs in the Sacramento-San Joaquin estuary and tributaries. Though the species does not occur in Yosemite National Park, the park contains the headwaters of tributaries that feed into downstream habitat for the species.	<b>Removed from Further Analysis.</b> This species does not occur within Yosemite National Park. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
REPTILES AND AMPHIBIANS					
California red-legged frog <i>Rana aurora draytonii</i>	FT	CSC		Found in quiet pools in permanent streams in mixed conifer zones and foothills. Prefers riparian deciduous habitat, quiet water refugia during high water periods, and emergent vegetation along pool or pond margins. Critical habitat for the California red-legged frog has been designated by United States Fish and Wildlife Service northwest of the project area within Yosemite National Park (final rule dated March 13, 2001, Federal Register 66:14625-14674). The last verified record for the frog in Yosemite is from 1984, at a lake in the northern portion of the park. Recent surveys have found no remaining red-legged frogs.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

<sup>a</sup> Status: FE = federally endangered, FT = federally threatened, FC = federal species of concern, FLC = federal species of local concern, FPE = federally proposed endangered, FD = federally delisted (status to be monitored for at least five years), CE = California endangered, CT = California threatened, CSC = California species of special concern, CR = California rare, PR = Yosemite park rare, PT = Yosemite park threatened

**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

	Status <sup>a</sup>				
Species	USFWS	State	Park	Habitat Type/Occurrence	Determination
BIRDS					
Bald eagle <i>Haliaeetus leucocephalus</i>	FT	CE		Forages over rivers, streams, and lakes. Primarily eats fish, also carrion, waterbirds, and small mammals. Transient through Yosemite Valley and El Portal. No bald eagles are nesting in the park (NPS 1997c). The species was proposed for delisting July 6, 1999.	<b>Remove from Further Analysis.</b> This species is expected as a transient visitor through Yosemite. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
FEDERALLY LISTED SPECIES OF CONCERN					
INVERTEBRATES					
Wawona riffle beetle <i>Atractelmis wawona</i>	FC			This aquatic species is a listed due to its limited distribution in the North and South Forks of the Merced River. Habitat includes rocks and mossy areas within the river channel. Suitable habitat observed for this species during a September 2002 survey of the project area (ESA 2002). The species has been observed in the Merced River during previous surveys.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Yosemite shoulderband snail <i>Helminthoglypta allynsmithi</i>	FC			Found in rockslide habitat with shade and moisture. This species is associated with rocky areas that are resistant to construction-related effects.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Indian Yosemite snail <i>Monadenia hillebrandi yosemitensis</i>	FC			Rockslide areas may be necessary for shelter. This species is associated with rocky areas that are resistant to effects.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Sierra pygmy grasshopper <i>Tetrix sierrana</i>	FC			Pygmy grasshoppers are often found in riparian areas, particularly in the spring and early summer. One record for El Portal (1953). Occurs in upland and riparian habitats.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Bohart's blue butterfly <i>Philotiella speciosa bohartorum</i>	FC			An annual in the buckwheat family, <i>Chorizanthe membranacea</i> , is the suspected host of this butterfly. The host plant is found in association with serpentine soils. No host plants or serpentine soils are found in the project area.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

	Status <sup>a</sup>				
Species	USFWS	State	Park	Habitat Type/Occurrence	Determination
FISH					
Longfin smelt <i>Spirinchus thaleichthys</i>	FC	CSC		Sloughs, edges of rivers and bays. General locations: Suisun Bay, Montezuma Slough, lower reaches of Sacramento and San Joaquin rivers, and the Delta.	<b>Removed from Further Analysis.</b> Not known from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
REPTILES AND AMPHIBIANS					
Limestone salamander <i>Hydromantes brunus</i>	FC	CT		Very limited distribution along Merced River and its tributaries between 800 and 2,500 feet in elevation, usually in association with limestone outcrops. This species has limited distribution along the Merced River and its habitat – limestone outcrops.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Mount Lyell salamander <i>Hydromantes platycephalus</i>	FC	CSC		Occurs in massive rock areas between 4,000 and 11,500 feet in elevation, in rock fissures, seeps, shade, and low-growing plants.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Foothill yellow-legged frog <i>Rana boylei</i>	FC	CSC		Formerly abundant and found up to 6,000 feet in elevation, this species has virtually disappeared from its range in the Sierra Nevada from unknown causes. Preferred habitat was rocky streams and wet meadows.	<b>Removed from Further Analysis.</b> Presumed extirpated from the park and the Sierra Nevada. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Yosemite toad <i>Bufo canorus</i>	FC	CSC		Restricted to areas of wet meadows in central high Sierra Nevada, between 6,400 and 11,300 feet.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Mountain yellow-legged frog <i>Rana muscosa</i>	FPE	CSC		A species of mountain habitats, occurring at elevations between 6,000 to over 12,000 feet, found in streams, lakes, and ponds in a variety of vegetation types.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Northwestern pond turtle <i>Clemmys marmorata marmorata</i>	FC	CSC		Found in the Sierra Nevada up to 6,000 feet in elevation, this species has decreased by up to 80% in numbers, probably due to habitat fragmentation and non-native predators. Habitat is permanent water in a variety of habitat types. Suitable habitat for this species occurs within the Merced River corridor. However, suitable habitat was not observed for this species during a September 2002 survey of the project area.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	FC	CSC		Found in the Sierra Nevada up to 6,000 feet in elevation, this species has decreased by up to 80% in numbers, probably due to habitat fragmentation and non-native predators. Habitat is permanent water in a variety of habitat types. Suitable habitat for this species occurs within the Merced River corridor. However, suitable habitat was not observed for this species during a September 2002 survey of the project area.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
<i>BIRDS</i>					
Harlequin duck <i>Histrionicus histrionicus</i>	FC	CSC		Breeds along large, swift-moving mountain rivers. Was formerly found in every major watershed in the Sierra, but has disappeared. Formerly nested in Yosemite Valley (NPS 1997c). Transients observed in Yosemite National Park near Table Rock just upstream from Cascades Diversion Dam in the spring of 2000. Nest observation occurred upstream of Cascades Diversion Dam in 2002 (NPS 2003b).	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Peregrine falcon <i>Falco peregrinus anatum</i>	FD/FC	CE		Usually nests on high cliffs near water to search for prey. The species was formally delisted August 25, 1999.	<b>Removed from Further Analysis.</b> This species does not nest within Yosemite Valley of the Merced River gorge. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Oak titmouse <i>Baeolophus inornatus</i>	FLC			Live oaks and deciduous woodlands. Common in the park at lower elevations. May be transient in the project area.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Black tern <i>Chlidonias niger</i>	FC	CSC		Prefers to nest in freshwater marshes, wet meadows, and sloughs, such as Sacramento River delta. Not found in the park (NPS 2003a).	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
American dipper <i>Cinclus mexicanus</i>	FLC			Permanent resident throughout most of western United States; along small, clear streams. Common in the park.	<b>Removed from Further Analysis.</b> This species is common in the park and is removed from further analysis as a special-status species. However, impacts to this species are considered as part of the general wildlife resources analysis. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Black swift <i>Cypseloides niger</i>	FC	CSC		Occurs in mountainous regions of the western United States and Canada. Currently, black swifts occur in three widely separated areas: central Colorado through central Utah; central and southwestern coastal California; and southern Alaska to northern Washington and inland to southwestern Alberta, northern Idaho, and northwestern Montana. Found in Yosemite Valley; may be transient in the project area.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Hermit warbler <i>Dendroica occidentalis</i>	FC			Found in various forest types. Common associates are subalpine fir, western white pine, Engelmann spruce, aspen, and larch. This species is not known to nest within the park.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Short-eared owl <i>Asio flammeus</i>	FC	CSC		Found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. This species is a winter migrant to the Central Valley, the western Sierra Nevada foothills, and the southern desert region.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Lewis' woodpecker <i>Melanerpes lewis</i>	FC			Occurs in open oak savannahs, broken deciduous and coniferous habitats. Breeds locally along eastern slopes of the Coast Ranges, and in the Sierra Nevada, Warner Mountains, Klamath Mountains, and in the Cascade Range.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Long-billed curlew <i>Numenius americanus</i>	FC	CSC		Breeds in wet meadow habitat in northeastern California. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
White-headed woodpecker <i>Picoides albolarvatus</i>	FLC			Occurs in montane coniferous forests up to lodgepole pine and red fir habitats in the Sierra Nevada, Cascade, Klamath, Transverse, and Peninsular Ranges, and Warner Mountains.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Rufous hummingbird <i>Selasphorus rufus</i>	FC			Found in a wide variety of habitats that provide nectar-producing flowers. Uses valley foothill hardwood, valley foothill hardwood-conifer, riparian, and various chaparral habitats in both northward and southward migration; montane riparian, aspen, and high mountain meadows (to treeline and above) used in southward migration.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Brewer's sparrow <i>Spizella breweri</i>	FC			Breeds in treeless shrub habitats with moderate canopy, especially in sagebrush.	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
California spotted owl <i>Strix occidentalis occidentalis</i>	FC	CSC		Breeds from oak and ponderosa pine forests upslope to lower-elevation red fir forests up to 7,600 feet, with mixed conifer the optimum type. Presence of black oak in the forest canopy also enhances habitat suitability. In Yosemite Valley, National Park Service wildlife staff confirmed spotted owl sightings near Happy Isles, Mirror Lake, the Chapel, and the base of Cathedral Rocks. No nesting owls occur within the project area, though suitable habitat is present (NPS 1999; 2003b).	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Little willow flycatcher <i>Empidonax traillii brewsteri</i>	FC	CE		Breeds in mountain meadows and riparian areas from 2,000 - 8,000 feet elevation in the Sierra Nevada, with lush growth of shrubby willows. Has disappeared from much of its range, due to habitat destruction and parasitism from brown-headed cowbirds. The area around Cascades Diversion Dam is devoid of lush riparian features necessary to support this species.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Bank swallow <i>Riparia riparia</i>	FC	CT		Prefers steep cliffs or banks near water.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
<b>MAMMALS</b>					
Spotted bat <i>Euderma maculatum</i>	FC	CSC		Rare throughout range. Uses crevices in rock faces for roosting and reproduction. Forages in a wide variety of habitats, primarily for moths.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Small-footed myotis bat <i>Myotis ciliolabrum</i>	FC			Usually found above 6,000 feet and in wooded and brushy habitats near water. Forages among trees and over water. Breeds in colonies in buildings, caves, and mines (NPS 1997b). Suitable habitat for this species occurs within Yosemite National Park. Cascades Diversion Dam is above the range of this species.	<b>Removed from Further Analysis.</b> Cascades Diversion Dam is above the range of this species. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Long-eared myotis bat <i>Myotis evotis</i>	FC			Wide range, from coast to high Sierra Nevada, in montane oak woodlands. Roosts primarily in hollow trees, especially large snags or lightning-scarred, live trees.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Fringed myotis bat <i>Myotis thysanodes</i>	FC			Found to at least 6,400 feet in the Sierra Nevada, in deciduous/mixed conifer forests. Feeds over water, in open habitats, and by gleaning from foliage. Roosts in caves, mines, buildings, and trees, especially large conifer snags.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Long-legged myotis bat <i>Myotis volans</i>	FC			Found up to high elevations in the Sierra Nevada, in montane coniferous forest habitats. Forages over water, close to trees and cliffs, and in openings in forests. Roosts primarily in large-diameter snags. Forms nursery colonies numbering hundreds of individuals, usually under bark or in hollow trees.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Yuma myotis bat <i>Myotis yumanensis</i>	FC			Usually occurs below 8,000 feet in elevation. Forages over open, still, or slow-moving water and above low vegetation in meadows. Roosts in buildings, caves, or crevices. Nursery colonies of several thousand individuals may be in buildings, caves, or mines.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Greater western mastiff bat <i>Eumops perotis californicus</i>	FC	CSC		Found in a variety of habitats to over 8,000 feet in elevation. Roosts primarily in crevices in cliff faces, and occasionally trees. Detected most often over meadows and other open areas, but will also feed above forest canopy; sometimes to high altitudes (1,000 feet).	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Pale big-eared bat <i>Corynorhinus townsendii pallescens</i>	FC	CSC		Found in all habitats up to alpine zone. Requires caves, mines, or buildings for roosting. Prefers mesic habitats where it gleans from brush or trees along habitat edges. Recorded at Wildcat Creek bridge and Mirror Lake (CDFG 1999).	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Townsend's big-eared bat <i>Corynorhinus townsendii townsendii</i>	FC	CSC		Found in all habitats up to alpine zone. Requires caves, mines, or buildings for roosting. Prefers mesic habitats where it gleans from brush or trees along habitat edges.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
Sierra Nevada snowshoe hare <i>Lepus americanus tahoensis</i>	FC	CSC		Uncommon resident of upper elevations in the Sierra Nevada. Prefers the edges of forested habitats, heterogeneous habitats, and areas with dense understory, particularly in riparian habitats.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
American Marten <i>Martes americanus</i>	FC			Found in dense, complex coniferous forests with large trees and snags. Structural complexity near the ground is important for foraging and protection from predators.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Pacific fisher <i>Martes pennanti pacifica</i>	FC	CSC		Occurs in coniferous forests and deciduous-riparian habitats with a high percent canopy closure, mostly above about 6,000 feet elevation. Carnivorous, but may also eat fruit and fungi. Densities of fisher in the central Sierra Nevada appear to be very low, for unknown reasons. Higher densities exist in both the northern and southern Sierra Nevada.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	FC	CT		Known only from Kern County from past records on the Kern Plateau. May be extirpated entirely from the region.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from actions proposed in this EA.
California wolverine <i>Gulo gulo luteus</i>	FC	CT		Found in a wide variety of mountain habitats. Needs water, caves, logs, or other cover for denning. No wolverine have been recorded within California since the 1970s (CDFG 1999). This species is presumed extirpated from California.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from actions proposed in this EA.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

	Status <sup>a</sup>				
Species	USFWS	State	Park	Habitat Type/Occurrence	Determination
VEGETATION					
Big-scale balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	FLC		PR	Valley and foothill grassland and woodland communities. Often associated with serpentine soils.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Short-leaved hulsea <i>Hulsea brevifolia</i>	FLC			Found in red fir forest.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Yosemite lewisia <i>Lewisia disepala</i>	FC			Occurs on fine gravel on rock outcrops, domes, or ridges. Suitable habitat for this species occurs within the park.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Pansy monkeyflower <i>Mimulus pulchellus</i>	FLC			Occurs in yellow pine forest, meadows, and seeps.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Yosemite popcorn-flower <i>Plagiobothrys torreyi</i> var. <i>torreyi</i>	FLC			Found in various forest habitats, meadows, and seeps.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Parasol clover <i>Trifolium bolanderi</i>	FC			Grows in red fir forest, yellow pine forest, moist meadows, and seeps.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

	Status <sup>a</sup>				
Species	USFWS	State	Park	Habitat Type/Occurrence	Determination
STATE-LISTED SPECIAL-STATUS SPECIES, SPECIES OF SPECIAL CONCERN, AND SPECIES OF LOCAL CONCERN					
BIRDS					
Golden eagle <i>Aquila chrysaetos</i>		CSC		Found in a wide range of elevations in the park. Needs open terrain for hunting. Feeds primarily on small mammals. Nests on cliffs and in large trees in open areas.	<b>Removed from Further Analysis.</b> This species is considered a transient visitor through Yosemite Valley. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Cooper's hawk <i>Accipiter cooperi</i>		CSC		A hawk of wooded areas, found up to 9,000 feet in the Sierra Nevada. Numerous recent records for Yosemite, especially in Yosemite Valley. Habitat destruction in its range has led to population declines. Frequently hunts along wooded edges (NPS 1997c).	<b>Removed from Further Analysis.</b> This species is relatively tolerant of high levels of disturbance. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Merlin <i>Falco columbarius</i>		CSC		Occurs mostly below elevations of 4,000 feet, ranging from annual grasslands to ponderosa pine and California black oak woodland, but prefers open country. Feeds primarily on birds. Reduction in numbers over recent decades may be due to pesticides. This species has not been reported in the Merced River corridor.	<b>Removed from Further Analysis.</b> This species is believed extirpated from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Long-eared owl <i>Asio otus</i>		CSC		Requires riparian or other thickets with small, densely canopied trees for roosting and nesting. Proximity of this habitat to meadow edges for hunting also enhances quality. One nesting record in Yosemite Valley in 1915 (NPS 1997c).	<b>Removed from Further Analysis.</b> This species does not nest within the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Yellow warbler <i>Dendroica petechia</i>		CSC		Prefers riparian woodlands, but also breeds in chaparral, ponderosa pine, and mixed conifer habitats with substantial amounts of brush. In recent decades, numbers of breeding pairs have declined dramatically in many lowland areas of California. A major cause of this decline has apparently been brown-headed cowbird parasitism (NPS 1997c).	<b>Removed from Further Analysis.</b> This species does not nest within the area of the dam. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

		Status <sup>a</sup>			
Species	USFWS	State	Park	Habitat Type/Occurrence	Determination
MAMMALS					
Pallid bat <i>Antrozous pallidus</i>		CSC		Primarily found below 6,000 feet in elevation, in a variety of habitats, especially oak, ponderosa pine, and giant sequoia habitats. Roosts in rock outcrops, caves, and especially hollow trees.	<b>Considered Further in this Analysis.</b> Suitable habitat for this species occurs within the vicinity of Cascades Diversion Dam. Refer to Chapter III, Affected Environment, for background data on this species and Chapter IV, Environmental Consequences, for an analysis of direct, indirect, or cumulative effects on this species.
VEGETATION					
Tompkin's sedge <i>Carex tompkinsii</i>		CR		Limited to foothill oak woodland and chaparral areas and along lower talus slopes. Found sporadically from Arch Rock to El Portal in the Merced River gorge. Not present in the project area.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Congdon's lewisia <i>Lewisia congdonii</i>		CR		Grows on moist, exposed, metamorphic rock faces and slopes. Occurs in chaparral and mixed conifer forest on north-facing slopes in shade.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Mariposa lupine <i>Lupinus citrinus</i> <i>var. deflexus</i>		CT		Known from granitic slopes in Mariposa county.	<b>Removed from Further Analysis.</b> Not known from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
PARK RARE PLANTS					
Sugar stick <i>Allotropa virgata</i>			PR	Confined to black oak and mixed conifer forest areas.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Sedge <i>Carex albonigra</i>			PR	Locally rare in the Sierra Nevada in alpine marshy areas and springs.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Congdon's sedge <i>Carex congdoni</i>			PR	Talus slopes.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Indian paintbrush <i>Castilleja foliolosa</i>			PR	Found on dry, open, rocky slopes on the edge of chaparral areas. Suitable habitat for this species is absent from the project area.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Child's blue-eyed Mary <i>Collinsia childii</i>			PR	Endemic to central and southern Sierra Nevada, reaching the northern extent of its range in Mariposa County. Occurs on shaded slopes and in open oak and mixed coniferous woodlands.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Collinsia <i>Collinsia linearis</i>			PR	Restricted to dry, metamorphic rock outcrops along the metamorphic-granitic contact zone.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Stream orchid <i>Epipactis gigantea</i>			PR	Restricted to moist granitic ledges, and planted in landscaped areas.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Fawn-lily <i>Erythronium purpurascens</i>			PR	Endemic to the Sierra Nevada, growing along shaded stream and river corridors.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Boreal bedstraw <i>Galium boreale ssp. septentrionale</i>			PR	Found in wet lower montane meadows. No meadow habitat occurs within the project area.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Pitcher sage <i>Lepechinia calycina</i>			PR	Found on rocky slopes within chaparral and canyon live oak woodlands.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Sierra laurel <i>Leucothoe davisiae</i>			PR	Grows in wet areas and bogs in acid soil. No habitat occurs near Cascades Diversion Dam.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
False pimpernel <i>Lindernia dubia</i> var. <i>anagallidea</i>			PR	Lives in wet meadows. No meadow habitat occurs near Cascades Diversion Dam.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Congdon's monkeyflower <i>Mimulus congdonii</i>			PR	Found in granitic soils in disturbed areas, seeps, runoff areas on slopes.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Palmer's monkeyflower <i>Mimulus palmeri</i>			PR	Restricted to damp, shaded slopes under canyon live oaks.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Azure penstemon <i>Penstemon azureus</i> ssp. <i>angustissimus</i>			PR	Generally found in moist woodlands and open forests.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Phacelia <i>Phacelia platyloba</i>			PR	Found in gravelly or rocky soils in chaparral and canyon live oak woodland.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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**Table D-1 (Continued)**  
**Special-Status Species Considered in this Analysis**

Species	Status <sup>a</sup>			Habitat Type/Occurrence	Determination
	USFWS	State	Park		
Phacelia <i>Phacelia tanacetifolia</i>			PR	Grows in moist sandy and gravelly open areas.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Wood saxifrage <i>Saxifraga mertensiana</i>			PR	Endemic to northern and central Sierra Nevada. Grows on mossy rocks and moist cliffs.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.
Ladies' tresses <i>Spiranthes porrifolia</i>			PR	Found in wet meadows.	<b>Removed from Further Analysis.</b> Suitable habitat for this species is absent from the project area. There is no expected direct, indirect, or cumulative effect on this species from the proposed action and this species is not evaluated further.

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